

REMARKS

Claims 1-21 and 40-58 are pending in the application with claims 1, 8, 13, 18, 46, and 55-58 amended herein. Applicant expresses appreciation for the Examiner's participation in a telephonic interview with Applicant's attorney, James Lake, on October 3, 2003. During the interview, the parties discussed the amendments to claim 55 presented herein compared to the teachings of Suntola in combination with Yu or Marscher. It is Applicant's understanding that agreement was reached that claim 55 is patentable over Suntola in combination with Yu or Marscher. Accordingly, allowance of claim 55 and claims 56-58 depending therefrom is respectfully requested the next Office Action.

In the interview, Applicant described the deficiencies of Suntola, Yu, and Marscher as applied to amended claim 55. Applicant expressed an opinion that amendments could be made to other claims pending in the application incorporating part or all of the limitations from amended claim 55 that would be effective to overcome the cited combination applied to such other claims. In the interview, Applicant summarized the cited art in the following manner which was discussed only in the context of claim 55.

Suntola pertains generally to atomic layer epitaxy but fails to disclose or suggest the compositional relationship set forth in the pending claims where a first layer comprises a first element, an interface layer comprises the first element and a second element different from the first element, and a second layer comprises the second element. Accordingly, Suntola fails to disclose or suggest the advantage provided by

such a compositional relationship of improving adhesion between the first layer and the second layer.

Yu pertains to a single atomic layer as an interface between monocrystalline silicon and monocrystalline metal oxide to promote epitaxial growth of the metal oxide. However, Yu fails to disclose or suggest the compositional relationship set forth in some of the pending claims where a first layer comprises a first metal, an interface layer comprises the first metal and a second metal different from the first metal, and a second layer comprises the second metal. Instead, Yu only applies to the circumstance of an interface between a monocrystalline silicon substrate and monocrystalline metal oxide. Also, Yu does not disclose or suggest a plurality of monolayers as an interface layer. The effectiveness of the teachings of Yu depends upon the presence of monocrystalline silicon and monocrystalline metal oxide on opposing sides of a single atomic interface layer as may be appreciated from Yu Fig. 13 and the text associated therewith.

Marscher pertains to relief of thermal expansion differences in gas turbine seals using graded, composite layers of metal and ceramic. However, Marscher is in a different art area compared to Suntola and Yu and is not applicable to interface layers in electronic devices or capacitors. A person of ordinary skill would not look to Marscher to solve adhesion problems between layers in electronic devices.

Given the characterization of the references asserted in the interview by Applicant, amendments are made herein that Applicant believes overcome the cited combination of references. Accordingly, Applicant requests reconsideration of the rejection of claims 1-21 and 40-54 as being unpatentable over Suntola in combination with Yu or Marscher.

If the Examiner disagrees with the Applicant's statement regarding the substance of the interview, Applicant requests a telephone conference with the Examiner to discuss possible clarification of the record. Also, in the event that the Examiner finds the amendments herein as failing to render all pending claims patentable over Suntola in combination with Yu or Marscher, Applicant requests a telephone conference to discuss possible further amendment.

Applicant asserts that adequate reasons supporting patentability of claims 1-21 and 40-58 are set forth herein and requests allowance of all such pending claims in the next Office Action.

Respectfully submitted,

Dated: 23 Oct 2003 By: JEL
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